



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/643,451

08/19/2003

Eric O. Zuber

02CR360/KE

4397

26383

7590

03/21/2008

ROCKWELL COLLINS, INC.
INTELLECTUAL PROPERTY DEPARTMENT
400 COLLINS ROAD NE
M/S 124-323
CEDAR RAPIDS, IA 52498

EXAMINER

GEE, JASON KAI YIN

ART UNIT

PAPER NUMBER

2134

MAIL DATE

DELIVERY MODE

03/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/643,451	Applicant(s) ZUBER ET AL.	
	Examiner JASON K. GEE	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is response to communication: amendment filed on 11/05/2007.
2. Claims 1-6 and 17-20 are currently pending in this application. Claims 1 and 17 are independent claims.
3. No IDS was received for this application.
4. It is noted that the 1.48 decision has been granted and the 1.78 decision has been dismissed. To this date, 03/18/2008, the Jakoubek reference, application no. 10/229,877, still has a different inventive entity as the present application, and this reference can still be applied as a 102(e).

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

6. The previous 112 rejections have been withdrawn in response to applicants' amendments and arguments.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2134

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 17, 18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Jakoubek US Patent Application Publication 2004/0052372 (hereinafter Jakoubek).

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

As per claim 1, Jakoubek teaches a multi-channel radio operating with multiple security levels, comprising: more than one input/output, each input/output corresponding to a security level (paragraph 20, 23, Figure 1); a first common bus coupled to the more than one input/output (Figure 1; also, the use of busses are inherent to connect input/output devices; paragraph 29); a first set of more than one processor coupled to the common bus, each of the first set of processors corresponding to a security level (Figure 1; paragraph 23); a second set of more than one processors coupled to the first set of processors (Figure 1); a second common bus coupled to the

Art Unit: 2134

first set of more than one processors and the second set of more than one procesors (Figure 1 paragraph 26), and more than one transceiver (Figure 1), each transceiver being coupled to at least one of the processors of the first set of processors (Figure 1)., wherein one of the first processors of the first set of processors encodes information received from one of the input or output (paragraphs 15 and 24); wherein the second common bus directs an encoded information so that it is received by an intended processor of the second set of more than one processors and not received or understood by another processor of the second set of more than one processors (paragraphs 24-28).

As per claim 2, Jakoubek teaches a second common bus coupled to the first set of processors and the second set of processors (paragraphs 25 and 26).

As per claim 3, Jakoubek teaches wherein one of the first processors of the first set of processors encodes information received from one of the inputs/outputs (paragraphs 23 and 24).

Claim 17 is rejected using the same basis of arguments used to reject claim 1 above.

As per claim 18, Jakoubek teaches wherein the second set of processors comprise red processing devices (Figure 1).

As per claim 20, Jakoubek teaches wherein the first set of processors comprises black processing devices.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-4, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell US Patent No. 6,944,475 (hereinafter Campbell), and in view of Watanabe et al. US Patent No. 5,991,642 (hereinafter Watanabe).

As per claim 1, Campbell teaches a multi-channel radio operating with multiple security levels, comprising: more than one input/output (Figure 1; col. 4 lines 45-55; col. 9 lines 15-34; Figure 7); a first common bus coupled to the more than one input/output (Figure 1 and Figure 2; col. 4 lines 45-55; col. 4 line 62-col. 5 line 11; col. 6 lines 29-33; col. 9 line 15-34; Figure 7); a first processor coupled to the common bus (Figure 1, Figure 4 item 428, Figure 7; col. 9 lines 15-34;); a second processor coupled to the first set of processor (Figure 4 item 440; col. 7 line 65 to col. 8 line 5); more than one transceiver (Figure 1); each transceiver being coupled to at least one of the processors of the first processors (Figure 1).

Although Campbell teaches the use of two set of processors, the sets of processors each only include one processor. However, multiple processor sets connected by a bus in a multi-channel communication system is taught throughout

Art Unit: 2134

Thedens, such as in shown in Figures 1 and 2. Thedens also teaches two common busses coupled to the first and second set of processors in these figures and also in col. 5 lines 15-60. Further, the first processors of the first set of processors encodes information received from one of the input or outputs, as taught in col. 4 lines 25-40. Campbell also teaches wherein teh second common bus directs an encoded information so that it is received by an intended processor of the second set of more than one processors and not received or understood by another processor of the second set of more than one processors (col. 5 line 60 to col. 6 line 14).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to include multiple busses connecting multiple processors. One of ordinary skill in the art would have been motivated to perform such an addition to prioritize highly sensitive materials in a communications systems, as taught by Thedens in col. 1 line 50 to col. 2 line 5.

As per claim 2, Campbell Thedens teaches wherein the first set of more than one processors are red processing devices (Figure 1).

As per claim 3, Campbell teaches wherein the second set of more than one processors are black processing devices (Figure 1)

As per claim 4, Campbell teaches wherein the first set of more than one processors are red processing devices (Figure 1)

Claim 17 is rejected using the same basis of arguments used to reject claim 1 above.

Claim 18 is rejected using the same basis of arguments used to reject claim 2 above.

Claim 20 is rejected using the same basis of arguments used to reject claim 3 above.

11. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell and Thedens as applied above, and further in view of Fletcher US SIR Reg. No. H1,836 (hereinafter Fletcher).

As per claim 5, the Campbell, and Thedens all teach switching devices, but does not explicitly teach wherein the first common bus is an Ethernet packet switching device. However, using Ethernet devices are well known in the art, as pertaining to multi-channel communication radios, and are taught throughout Fletcher, such as in col. 16 lines 20-30.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the Campbell combination with Fletcher. Fletcher teaches that a switching modules may include many components, such as busses and Ethernet interfaces. As Ethernet is well known in the art and used commonly to those in the field, it would have been obvious to make a switch compatible for Ethernet packets. Providing an Ethernet switch would make the invention more practical and adaptable to use as Ethernet is well known and used frequently.

12. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell, and Thedens as applied above, and further in view of Mahany US Patent No. 5,960,344 (hereinafter Mahany).

As per claim 6, the Campbell combination teaches the use of a bus, but does not explicitly recite PCI busses. However, PCI busses are well known in the art, and may be implemented in multi-channel radios, such as taught by Mahany in col. 9 lines 10-21.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teachings of the Campbell combination with Mahany. PCI busses are well known in the art and used commonly, and it would have been obvious to incorporate PCI busses to make the systems compatible with the systems on the market.

Claim 19 is rejected using the same basis of arguments used to reject claim 6 above.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2134

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON K. GEE whose telephone number is (571)272-6431. The examiner can normally be reached on M-F, 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Gee
Patent Examiner
Technology Center 2100
03/18/2008

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2134